

Title (en)

PHASE SHIFT UNIT, ANTENNA UNIT, PHASED ARRAY UNIT AND PHASED ARRAY

Title (de)

PHASENVERSCHIEBUNGSEINHEIT, ANTENNENEINHEIT, PHASENGESTEUERTE GRUPPENEINHEIT UND PHASENGESTEUERTE GRUPPENANTENNE

Title (fr)

UNITÉ DE DÉPHASAGE, UNITÉ D'ANTENNE, UNITÉ DE RÉSEAU À COMMANDE DE PHASE ET RÉSEAU À COMMANDE DE PHASE

Publication

EP 4148899 A4 20240605 (EN)

Application

EP 21799659 A 20210422

Priority

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- CN 2021089025 W 20210422

Abstract (en)

[origin: EP4148899A1] Provided are a phase-shifting unit, an antenna unit, a phased array unit, and a phased array. The phase-shifting unit includes a common port, a switch, and two connection ports. A transmission line between the two connection ports is provided with at least two branch ports. Positions of the at least two branch ports on the transmission line are different. The transmission line between every two adjacent branch ports includes a delay line. The switch is configured to switch to a target branch port and establish the connection between the target branch port and the common port so that the common port is connected to the two connection ports to form two paths. Each path is configured to establish the communication connection between the connection port corresponding to each path and the common port to transmit a signal. The magnitude of phase shift between a phase of an input signal of each path and a phase of an output signal of the path matches the delay line included in the path.

IPC 8 full level

H01P 1/18 (2006.01); **H01P 9/00** (2006.01); **H01Q 3/26** (2006.01); **H01Q 21/06** (2006.01); **H01Q 21/08** (2006.01)

CPC (source: CN EP US)

H01P 1/18 (2013.01 - CN US); **H01P 1/184** (2013.01 - EP); **H01P 9/006** (2013.01 - EP); **H01Q 3/2682** (2013.01 - EP); **H01Q 3/34** (2013.01 - CN); **H01Q 3/36** (2013.01 - US); **H01Q 21/061** (2013.01 - EP); **H01Q 21/08** (2013.01 - EP)

Citation (search report)

- [XAI] WO 2008056184 A1 20080515 - BAE SYSTEMS PLC [GB], et al
- [A] US 2009189826 A1 20090730 - TIMOFEEV IGOR E [US], et al
- [A] US 2016049709 A1 20160218 - KARIKOMI MASAHIRO [JP], et al
- [A] WO 9943036 A1 19990826 - SUMITOMO ELECTRIC INDUSTRIES [JP], et al
- [A] US 2018294537 A1 20181011 - BORYSENKO SERGIY [CA]
- See also references of WO 2021223602A1

Designated contracting state (EPC)

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